

Comparisons of Job Characteristics

Focus Occupation: [Environmental Engineering Technicians \(17-3025\)](#)

Associated Occupation: [Agricultural and Food Science Technicians \(19-4011\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 32

Focus Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Biology	3.7	10.1	6.8	<<	Extensive education and/or training may be required
Chemistry	4.8	10.0	7.0	<<	Extensive education and/or training may be required
Food Production	2.1	9.1	1.4	<<	Extensive education and/or training may be required
Production and Processing	6.0	9.1	3.2	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Writing	9.2	10.7	11.3	0	Current skill level may be sufficient
Mathematics	6.2	7.9	11.3	>>	Skill level is likely more than sufficient
Science	4.5	7.8	8.3	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Environmental Engineering Technicians (17-3025)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Oral Expression	12.4	12.0	12.7	0	Current ability level may be sufficient
Oral Comprehension	12.5	11.8	14.4	>	Current ability level is likely sufficient
Written Expression	9.8	11.4	12.0	0	Current ability level may be sufficient
Written Comprehension	11.0	11.2	16.6	>>	Current ability level is likely more than sufficient
Near Vision	11.1	10.7	14.7	>>	Current ability level is likely more than sufficient
Problem Sensitivity	11.1	10.7	15.9	>>	Current ability level is likely more than sufficient
Deductive Reasoning	10.6	10.3	14.5	>>	Current ability level is likely more than sufficient
Inductive Reasoning	10.2	10.0	13.6	>>	Current ability level is likely more than sufficient
Category Flexibility	9.0	9.5	11.8	>	Current ability level is likely sufficient
Mathematical Reasoning	6.3	8.5	10.6	>	Current ability level is likely sufficient
Number Facility	6.3	7.4	10.6	>>	Current ability level is likely more than sufficient
Time Sharing	6.6	7.1	6.5	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 73

Focus Occupation: Environmental Engineering Technicians (17-3025)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Work Activities	Exclusivity of Activity
Analyze scientific research data or investigative findings	27
Communicate technical information	4
Follow safe waste disposal procedures	50
Maintain records, reports, or files	5
Record test results, test procedures, or inspection data	48
Use chemical testing or analysis procedures	54
Use government regulations	44
Use hazardous materials information	35
Use knowledge of metric system	39
Use laboratory equipment	60
Use precision measuring tools or equipment	17
Use scientific research methodology	21

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 77

Focus Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Business function specific software	1
Chemical evaluation instruments and supplies	10
Clinical and diagnostic analyzers and accessories and supplies	18
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Fermentation equipment	31
Fluid mechanics equipment	11
Gas analyzers and monitors	10
General laboratory glassware and plasticware and supplies	13
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory baths	24
Laboratory blending and dispersing and homogenizing equipment and supplies	27
Laboratory centrifuges and accessories	13
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Laboratory electron and solid state physics equipment	29
Laboratory enclosures and accessories	17
Laboratory environmental conditioning equipment	24
Laboratory heating and drying equipment	13
Laboratory incubating equipment	20
Laboratory microscope slides and supplies	20
Laboratory mixing and stirring and shaking equipment and supplies	19
Laboratory ovens and accessories	15
Laboratory water purification equipment and supplies	29
Light and wave generating and measuring equipment	4
Liquid and solid and elemental analyzers	19
Meteorological instruments	16
Network applications software	1
Pipettes and liquid handling equipment and supplies	16
Safety apparel	4
Sampling equipment	12

Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Test Tubes	26
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.